

April 20, 2017

Dave Blye Environmental Standards, Inc. 1140 Valley Forge Road PO Box 810 Valley Forge, PA 19482

RE: Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Dear Dave Blye:

Enclosed are the analytical results for sample(s) received by the laboratory on April 13, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carol Davy

Oard Day

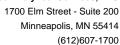
carol.davy@pacelabs.com 1(612)607-6436

Project Manager

Enclosures

cc: Meg Michell, Environmental Standards, Inc.







CERTIFICATIONS

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: UST-078

Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas Certification #: 88-0680
California Certification #: MN00064
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: 8TMS-L
Florida Certification #: E87605
Georgia Certification #: 959

Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064

Maine Certification #: MN00064 Maryland Certification #: 322 Michigan Certification #: 9909 Minnesota Certification #: 027-053-137 Mississippi Certification #: MN00064 Montana Certification #: CERT0092 Nebraska Certification #: NE-OS-18-06

Nevada Certification #: MN00064 New Hampshire Certification #: 2081 New Jersey Certification #: MN002 New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: 74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163

Washington Certification #: C486 West Virginia DW Certification #: 9952 C West Virginia WW Certification #: 382 Wisconsin Certification #: 999407970

Wyoming via EPA Region 8 Certification #: 8TMS-L

REPORT OF LABORATORY ANALYSIS

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10384872 2 of 25





SAMPLE SUMMARY

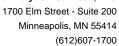
Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10384872001	HFL-SVDB-T170412131154	Water	04/12/17 10:13	04/13/17 10:00
10384872002	OWS-WAFO-T170412131247	Water	04/12/17 11:21	04/13/17 10:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10384872001	HFL-SVDB-T170412131154	SM 2540D	NAS	1	PASI-M
10384872002	OWS-WAFO-T170412131247	SM 2540D	NAS	1	PASI-M

REPORT OF LABORATORY ANALYSIS

(612)607-1700



PROJECT NARRATIVE

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Method: SM 2540D

Description: 2540D TSS, Low Level
Client: GE_Anchor QEA, LLC
Date: April 20, 2017

General Information:

2 samples were analyzed for SM 2540D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

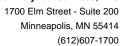
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

5 of 25

Page 5 of 12





ANALYTICAL RESULTS

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Sample: HFL-SVDB-T170412131154 Lab ID: 10384872001 Collected: 04/12/17 10:13 Received: 04/13/17 10:00 Matrix: Water

Parameters Results Units **PQL** MDL DF Prepared CAS No. Analyzed Qual 2540D TSS, Low Level Analytical Method: SM 2540D Total Suspended Solids 04/18/17 12:16 6.6 mg/L 1.0 0.52

REPORT OF LABORATORY ANALYSIS



1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

ANALYTICAL RESULTS

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Sample: OWS-WAFO-Lab ID: 10384872002 Collected: 04/12/17 11:21 Received: 04/13/17 10:00 Matrix: Water

T170412131247

Parameters Results Units **PQL** MDL DF CAS No. Qual Prepared Analyzed 2540D TSS, Low Level Analytical Method: SM 2540D Total Suspended Solids 17.1 mg/L 1.0 0.50 04/18/17 12:16

Page 7 of 12

Minneapolis, MN 55414 (612)607-1700



QUALITY CONTROL DATA

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Date: 04/20/2017 12:27 PM

QC Batch: 469114 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D TSS, Low Level

Associated Lab Samples: 10384872001, 10384872002

METHOD BLANK: 2561709 Matrix: Water

Associated Lab Samples: 10384872001, 10384872002

> Blank Reporting Limit MDL Parameter Result Qualifiers Units Analyzed

Total Suspended Solids <1.0 1.0 0.50 04/18/17 12:16 mg/L

LABORATORY CONTROL SAMPLE & LCSD: 2561711 2561710 Spike LCS LCSD LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limits **RPD RPD** Qualifiers 3 **Total Suspended Solids** mg/L 100 92.1 94.9 92 80-120

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

10384872 8 of 25



QUALIFIERS

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

Date: 04/20/2017 12:27 PM

PASI-M Pace Analytical Services - Minneapolis

Page 9 of 12 9 of 25 10384872

(612)607-1700



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Hudson River Remedial Action M

Pace Project No.: 10384872

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10384872001	HFL-SVDB-T170412131154	SM 2540D	469114		
10384872002	OWS-WAFO-T170412131247	SM 2540D	469114		

REPORT OF LABORATORY ANALYSIS

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10384872

Date: 04/20/2017 12:27 PM

ENVIRONMENTAL SAMPLE CHAIN OF CUSTODY

Sample Custodian:

10384825

Labi Project: Hudson River Remedial Action Monitoring Program - Resuspension Monitoring

PACE COC ID: COG170412131419PACE

6.

reservativo 4degC 4degC 4degC 4degC N N 504 N N 504 504 504 Turn Around Time (hrs) z Z 9 MSD z z MS z METHOD SM 2540D NE294_02 Total Suspended Solids 🌸 SM 2540D NE294_02 TEST REQUESTED Total Suspended Solids CS PCBs CS PCBs εŪ # Containers Š \$ Media 04/12/2017 11:21 Time Collected Date Collected 04/12/2017 3 ≥ Matrix ** QA/QC Ŗ Š

OWS-WAFO-T170412131247

8

HFL-SVDB-T170412131154 Field Sample ID

흄

COC Sample Number 100

** W = Total/Whole, D = Dissolved, R = Residue, S = Sediment 7/13/1/2 * S= SEDIMENT, W= WATER, PW= PORE WATER Date Printed: 4/12/2017.

WW-沙%

7) 60

Comments:

(२००)

4-13-17

Page 11 of 12

Client: General Electric Company

A ANCHOR



Document Name: Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.20 Document Revised: 19Dec2016

Page 1 of 2

Issuing Authority: Pace Minnesota Quality Office

Sample Condition Client Name:			Project	*: (IIOH: 4 020 4972 T
Upon Receipt Archor QEA/ General	_ (F	Tech	ک (ت	** W0#:10384872
	Tusps			
	Other:_		iiciit	
Tracking Number: 7145 4771 8373				10384872
Custody Seal on Cooler/Box Present?	S	ieals Inta	ıct? 🖊	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Bags	□None	. 🗆	ther:	Tomo Blank? Van Bu
	Пионе	: 🗀 ८	/mei	Temp Blank? Yes No
Thermometer	Туре	of Ice:	Wet	Blue None Samples on ice, cooling process has begun
Cooler Temp Read (°C): 0.3 Cooler Temp Corre	cted (°C):	0.	2	Biological Tissue Frozen? Yes No A/A
Temp should be above freezing to 6°C Correction Factor	:	73.2	Date	and Initials of Person Examining Contents:
USDA Regulated Soil (N/A, water sample) Did samples originate in a quarantine zone within the United Sta	τρς: ΔΙ Δ	R CA FI	GA ID I	A. MS, Did samples originate from a foreign source (internationally,
NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?		□Ye	es 🗀	No including Hawaii and Puerto Rico)? Yes No
If Yes to either question, fill out a Regul	ated Soil	Checklis	t (F-MN-	Q-338) and include with SCUR/COC paperwork.
				COMMENTS:
Chain of Custody Present?	Yes	□No		1.
Chain of Custody Filled Out?	Yes	□No		2.
Chain of Custody Relinquished?	Yes	□No		3.
Sampler Name and/or Signature on COC?	□Yes		N/A	4.
Samples Arrived within Hold Time?	Yes	□No		5.
Short Hold Time Analysis (<72 hr)?	Yes	⊿ No		6.
Rush Turn Around Time Requested?	∐Yes	□ MO		7.
Sufficient Volume?	Yes	□No		8.
Correct Containers Used?	Ves	□No		9.
-Pace Containers Used?	Yes	□No		
Containers Intact?	Yes	□No		10.
Filtered Volume Received for Dissolved Tests?	□Yes	□No	N/A	11. Note if sediment is visible in the dissolved container
Sample Labels Match COC?	Ves	□No		12.
-Includes Date/Time/ID/Analysis Matrix: W1				
All containers needing acid/base preservation have been checked?	□Yes	∏No	☑ N/A	13. ☐HNO₃ ☐H₂SO₄ ☐NaOH Positive for Res.
All containers needing preservation are found to be in	1e3	Пип	LØ IN/A	Chlorine? Y N
compliance with EPA recommendation? {HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide}	п.,	г.		
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease,	Yes	∏No	□Z N/A	Initial when Lot # of added
DRO/8015 (water) and Dioxin.	Yes	□No	ZN/A	completed: preservative:
Headspace in VOA Vials (>6mm)?	Yes	□No	ØN/A	14.
Trip Blank Present?	□Yes	□No	∑ N/A	15.
Trip Blank Custody Seals Present?	∐Yes	∐No	J M/A	•
Pace Trip Blank Lot # (if purchased):	-			
CLIENT NOTIFICATION/RESOLUTION Person Contacted:				Field Data Required? Yes No
Comments/Resolution:				Date/Time:
Comments/Nesolution.				
Project Manager Review:		<u> </u>		Date: 4/14/17
Note: Whenever there is a discrepancy affecting North Carolina com	pliance sa	mples	opy of thi	s form will be sent to the North Carolina DEHNR Certification Office (i.e. out of
hold, incorrect preservative, out of temp, incorrect containers).		_		

Page 12 of 12

12 of 25

10384872



Analytical Data Package

Prepared by:

Pace Analytical Services

Pace Project No.: 10384872

10384872 13 of 25

Table Of Contents _____



InOrganic

Gravimetric

Analytical Results (Form 1-IN)	1
Blanks (Form 3-IN)	3
Duplicates (Form 6-IN)	4
Laboratory Control Spike (Form 7-IN)	5
Method Detection Limits (Form 9-IN)	7
Preparation Log (Form 12-IN)	8
Analysis Run Log (Form 13-IN)	9
Preparation Logs Raw Data	10

FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

HFL-SVDB-T170412131154

Lab Name: Pace Ar	nalytical - Minnesota	SDG No. : 10384872	Contract:	Hudson River Remedial Action
Lab Sample ID: 10	384872001	_	Percent M	oisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Suspended Solids	6.6		mg/L	1	04/18/2017 12:16

FORM I INORGANIC-1 INORGANIC ANALYSIS DATA SHEET

OWS-WAFO-	
Γ170412131247	

Lab Name: Pace Analytical - Minnesota SDG No. : 10384872 Contract: Hudson River Remedial Action
Lab Sample ID: 10384872002 Percent Moisture:

CAS No.	Analyte	Concentration	Q	Units	DF	Analysis Date/Time
	Total Suspended Solids	17.1		mg/L	1	04/18/2017 12:16

FORM III INORGANIC-1 BLANKS

Lab Name: Pace Analytical - Minnesota	SDG No. : 10384872 Contract : Hudson River Remedial Action M
Method Blank Matrix: Water	Instrument ID: 10WET4
Method Blank Concentration Units: mg/L	

Analyte	Initial Calibration Blank		Continuing Calibration Blank					Method Blank		
		С		С		С		О	2561709	С
Total Suspended Solids									<1.0	U

04/20/2017 10:07 10384872

3 of 11 17 of 25

2561711LCSD

FORM VI INORGANIC-1 DUPLICATES

Lab Name:	Pace Analytical - Minnesota	SDG No.: 10384872	Contract:	Hudson River Remedial Action

Matrix: Water Concentration Units: mg/L

Percent Moisture: Basis: Wet

Analyte	Control Limit	Sample	Duplicate	RPD
Total Suspended Solids	10	92.1	94.9	3

FORM VII INORGANIC-1 LABORATORY CONTROL SAMPLE

2561710LCS

Lab Name: Pace Analytical - Minnesota SDG No. : 10384872 Contract: Hudson River Remedial Action

Matrix: Water

Analyte	Units	True	Found	%R	Lin	nits
Total Suspended Solids	mg/L	100	92.1	92	80	120

FORM VII INORGANIC-2 LABORATORY CONTROL SAMPLE

256171	11	CSD

Lab Name: Pace Analytical - Minnesota SDG No. : 10384872 Contract: Hudson River Remedial Action

Matrix: Water

Analyte	Units	True	Found	%R	Lin	nits
Total Suspended Solids	mg/L	100	94.9	95	80	120

FORM IX INORGANIC-1 METHOD DETECTION LIMITS

Lab Name: Pace Analytical - Minnesota SDG No.: 10384872 Contract: Hudson River Remedial Action M

Preparation Method: SM 2540D Instrument ID: 10WET4

Concentration Units: mg/L

Analyte	PQL	MDL	MDL Date
Total Suspended Solids	2.0	1.0	04/01/2015

FORM XII INORGANIC-1 PREPARATION LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10384872 Contract: Hudson River Remedial Action M

Preparation Method: SM 2540D Batch: WET 53010

Lab Sample ID	Sample Name	Preparation Date	Initial Volume (mL)	Final Volume (mL)
2561709	2561709	04/18/2017	1000	500
2561710	2561710	04/18/2017	1000	500
2561711	2561711	04/18/2017	1000	500
10384872001	HFL-SVDB-	04/18/2017	955	500
10384872002	OWS-WAFO-	04/18/2017	1000	500

FORM XIII INORGANIC-1 ANALYSIS RUN LOG

Lab Name: Pace Analytical - Minnesota SDG No. : 10384872 Contract: Hudson River Remedial Action M

Instrument ID: 10WET4 Analysis Method: SM 2540D

Start Date: 04/18/2017 12:16 End Date: 04/18/2017 12:16

Sample Name	Lab Sample ID	D/F	Date	Time	tss w
2561709BLANK	2561709	1	04/18/2017	12:16	Χ
2561710LCS	2561710	1	04/18/2017	12:16	Χ
2561711LCSD	2561711	1	04/18/2017	12:16	Χ
HFL-SVDB-T170412131154	10384872001	1	04/18/2017	12:16	Х
OWS-WAFO-	10384872002	1	04/18/2017	12:16	Χ

**Face Analytical* Prep Log Report

Batch Information: WET 53010 TSS LL

14 | 04/18/2017 13:30 | NAS 14 | 04/19/2017 07:38 | NAS 4310 NAS Thermometer ID Desic. In 1 ID | Date/Time | Init Desic. In 2 ID | Date/Time | Init Analyzed By **Batch Notes** 103.0 | 103.0 | 04/19/2017 07:38 | NAS 103.0 | 103.0 | 04/18/2017 13:30 | NAS 04/19/2017 15:18 SM 2540D 10WET17 Corr | Date/Time | Init Oven Temp Out2 | Corr | Date/Time | Init Reviewed By Date Analysis Method
Analysis Method
Apple Appl Oven Temp Out1

Template Version: F-MN-I-326-Rev.03 (24Jan2017)

104.0 | 104.0 | 04/18/2017 12:16 | NAS

Oven Temp In1 | Corr Date/Time | Init

Oven Temp Correction

Factor

Instrument

103-105 C

Acceptance Range:

104.0 | 104.0 | 04/18/2017 15:23 | NAS

Oven Temp In2 | Corr Date/Time | Init

04/18/2017 15:19 | NAS

Date/Time | Init Desic. Out 1

DCL

Reviewed By

04/19/2017 09:00 | NAS

Desic. Out 2 Date/Time | Init

Sample II	Sample Information:													
GC Rule	Sample Type	Dablgms2 dsJ	Select	aı	(J\gm) Isni3 SST	TSS Posted (mg/L)	Run Date/Time	əmuloV laitial (mL)	TSS Filters ()	Filter Wt 1 (9)	Filter Use 1	(9) l 1W navO	f əsU nəvO	Oven Wt 2 (g)
1 2540D WLL	BLA	2561709	Y	cMX7B	-0.50000	-1.0000	04/18/2017 12:16	1000	116205 ()	0.1158	M	0.1156	Z	0.1153
o 2540D WLL	T CS	2561710	Y	cMX7C	92.100	184.20	04/18/2017 12:16	1000	116205 ()	0.1143	M	0.2065	Z	0.2064
11 2540D WLL	L LCSD	2561711	Y	cMX7D	94.900	189.80	04/18/2017 12:16	1000	116205 ()	0.1314	M	0.2264	Z	0.2263
2540D WLL	L PS	10384872001	Y	cMX7E	6.5969	12.600	04/18/2017 12:16	955	116205 ()	0.1180	M	0.1245	Z	0.1243
2540D WLL	L PS	10384872002	Y	cMX7F	17.100	34.200	04/18/2017 12:16	1000	116205 ()	0.1186	M	0.1359	Z	0.1357
2540D WLL	L PS	10385163001	Y	cMX7G	7.6382	15.200	04/18/2017 12:16	995	116205 ()	0.1323	M	0.1402	Z	0.1399
2540D WLL	L PS	10385163002	Y	cMX7H	21.579	41.000	04/18/2017 12:16	950	116205 ()	0.1126	M	0.1334	Z	0.1331
თC Rule	Sample Type	Lab Sample ID	Oven Use 2	S&I Tiid% nevO	Oven Wt Diff 1&2	sətoN əldmsS	TS/TDS-SPK (mL)							

Othu, 20 Apr 2017 10:07:56 -0500 G1

115777 (50)115777 (50)

0.0003

85.714

2561709 2561710 2561711

BLANK

2540D WLL 2540D WLL 2540D WLL

0.0001 0.0001

0.108520.10532 3.1250

0.0002

 \succ

10384872001

2540D WLL

LCSD

 Γ CS

Pace Analytical Prep Log Report

TS/TDS-SPK (mL)				
Sample Notes		1*	1*	
S&f Tiid 1W nevO	0.0002	0.0003	0.0003	
Oven %Diff 1&2	1.1628	3.8710	1.4528	
S 9sU nəvO	Y	Y	Y	
Di əlqms2 ds	10384872002	10385163001	10385163002	
Sample Type	PS	PS	PS	S:
9ln R 200	2540D WLL	2540D WLL	2540D WLL	Sample Notes:
1038487 2				

1*: Insufficient sample volume Standard Notes:

115777: TS/TSS/TDS Handmade Standard, Used